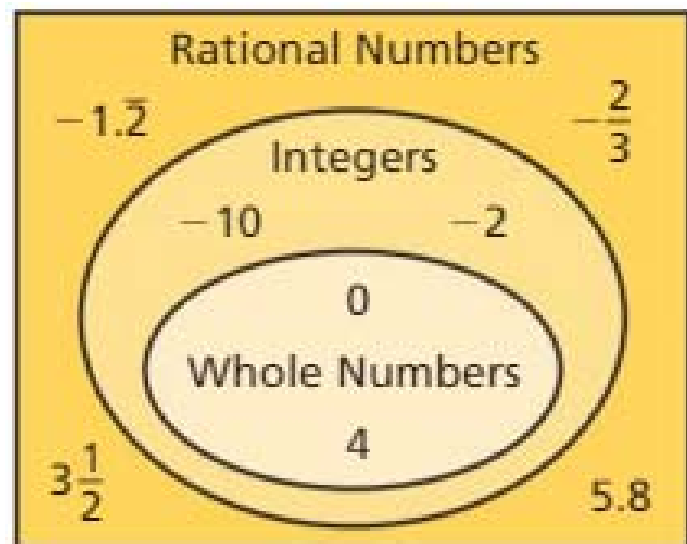


12.1 (pg. 520) Rational Numbers

A **rational number** is a number that can be written as $\frac{a}{b}$ where a and b are **integers** and $b \neq 0$.



Reminder: An **integer** is a number that is a whole number or the opposite of a whole number.



A **terminating decimal**, like 0.8, 0.625, or -1.25 , is a decimal whose division ends, or terminates.

A **repeating decimal**, like $-0.333\dots$ or $0.2828282828\dots$, is a decimal whose digits repeat in groups of one or more.

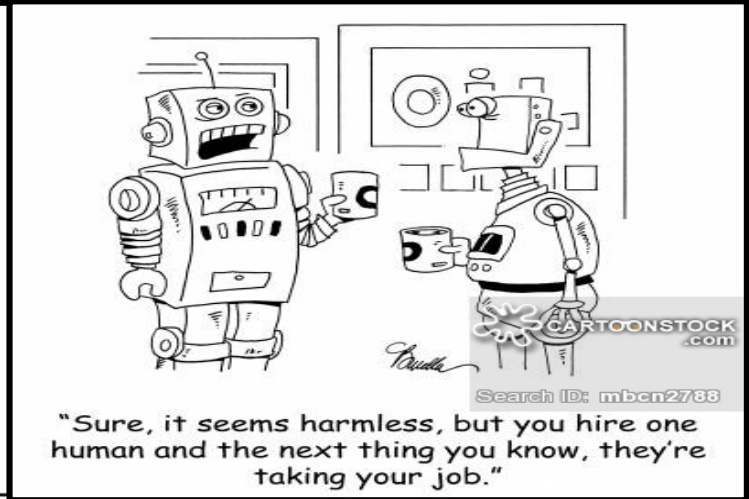
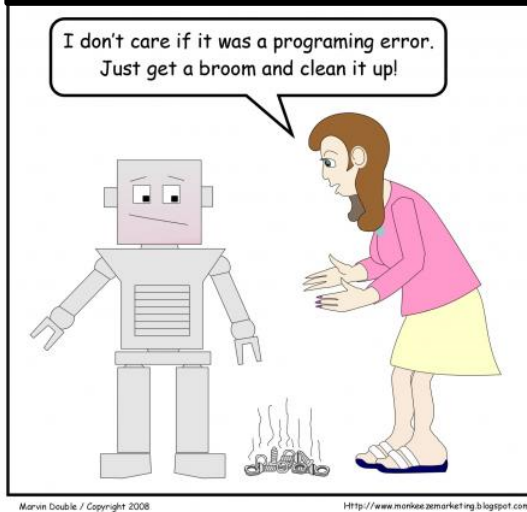


Writing Rational Numbers as Decimals:

Ex. $-2 \frac{1}{2}$

First turn it into an improper fraction: $-\frac{5}{2}$

Then divide...and you get: -2.5



Writing a Decimal as a Fraction:

Ex. -0.26

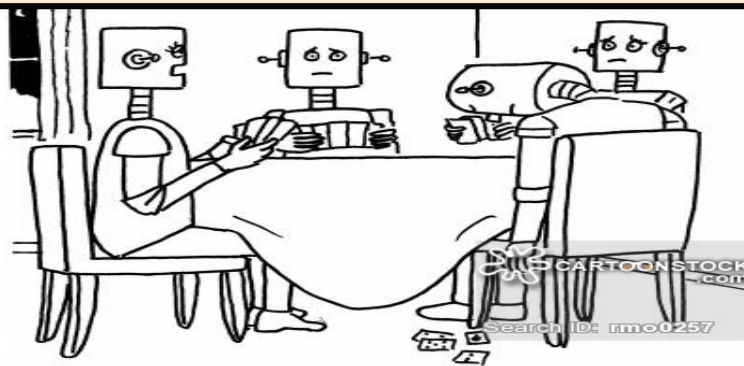
$-0.26 = -\frac{26}{100}$

Write the digits after the decimal point in the numerator.

The last digit is in the hundredths place. So, use 100 in the denominator.

$= -\frac{13}{50}$

Simplify.



"He's not much fun in the evenings -- he's solar powered."

Ordering Rational Numbers:

Write each rational number as a decimal...may also help to graph each decimal on a number line.

Creature	Elevation (kilometers)
Anglerfish	$-\frac{13}{10} = -1.3$
Squid	$-2\frac{1}{5} = -2.2$
Shark	$-\frac{2}{11} = -0.\overline{18}$
Whale	-0.8

